DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-014155

Address: 333 Burma Road **Date Inspected:** 11-May-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Zhao Chen Sun **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No **Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component: Tower Components**

Summary of Items Observed:

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

TOWER TRIAL ASSEMBLY

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 005710

Visual Inspection Testing (VT)

This QA inspector performed VT of the area previously tested and accepted by ZPMC Quality Control personnel. The member is identified as Tower Component. The identified component and weld designations reviewed are as follows:

NORTH TOWER SHEAR PLATE SPLICE PLATE

NSD1 - A112A/H - 1A/B: 3A/B

NSD1 - A112A/H - 1; 2

NSD1 – A112B/H – 136; 137

WEST TOWER SHEAR PLATE SPLICE PLATE

WSD1 - A423A/H - 3A/B

WSD1 - A423B/H - 136: 137

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Magnetic Particle Testing (MT)

This QA inspector performed MT of the area previously tested and accepted by ZPMC Quality Control personnel.

This QA Inspector generated an MT report for this date. The member is identified as Tower Component. The weld designation reviewed as follows:

NORTH TOWER SHEAR PLATE SPLICE PLATE – GREEN TAG # 12537

NSD1 - A112A/H - 1A/B; 3A/B

NSD1 - A112A/H - 1; 2

NSD1 – A112B/H – 136; 137

WEST TOWER SHEAR PLATE SPLICE PLATE – GREEN TAG # 12538

WSD1 - A423A/H - 3A/B

WSD1 – A423B/H – 136; 137

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 005714

Visual Inspection Testing (VT)

This QA inspector performed VT of the area previously tested and accepted by ZPMC Quality Control personnel. The member is identified as Tower Component. The identified component and weld designations reviewed are as follows:

NORTH TOWER LIFT – 1 FAÇADE PLATE

NSD1 - SA159C/J - 21/22

NSD1 - SA10 - 23/24/25/26

NSD1 - SA10 B/K- 8/9

WEST TOWER LIFT – 1 FAÇADE PLATE

WSD1 - SA107C/J - 1/2/3/4/9/10/17/18

WSD1 - SA225A/H - 66/67

WSD1 - SA39-21/22

Magnetic Particle Testing (MT)

This QA inspector performed MT of the area previously tested and accepted by ZPMC Quality Control personnel.

This QA Inspector generated an MT report for this date. The member is identified as Tower Component. The weld designation reviewed as follows:

NORTH TOWER LIFT – 1 FAÇADE PLATE

NSD1 - SA10 - 23/24

WEST TOWER LIFT – 1 FAÇADE PLATE

WSD1 - SA107C/J - 1

WSD1 - SA225A/H - 66

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 005715

Visual Inspection Testing (VT)

This QA inspector performed VT of the area previously tested and accepted by ZPMC Quality Control personnel.

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The member is identified as Tower Component. The identified component and weld designations reviewed are as follows:

NORTH TOWER, SMALL DOUBLER PLATE - 47.6M

 $P475 - N - 1 \sim 4$

Magnetic Particle Testing (MT)

This QA inspector performed MT of the area previously tested and accepted by ZPMC Quality Control personnel.

This QA Inspector generated an MT report for this date. The member is identified as Tower Component. The weld designation reviewed as follows:

NORTH TOWER, SMALL DOUBLER PLATE – 47.6M

 $P475 - N - 1 \sim 4$

This QA Inspector observed the following work in progress:

Shielded Metal Arc Welding (SMAW):

Weld joint # 05 located on West Tower Lift – 1 Skin 'A' doubler plate P475 - W. Welder is identified as 040724. ZPMC Quality Control (QC) Inspector is identified as Li Jun. The welding variables recorded by QC appeared to comply with the WPS -B - T - 4213 - Tc - U4c - 2. (See attached photo)

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

No Relevant Conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest - 15000422360, who represents the Office of Structural Materials for your project.

Inspected By: Kumar, Sandeep Quality Assurance Inspector

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Reviewed By: Clifford,William QA Reviewer